

ON A SUPPOSED NEW GENUS OF THE N.O.
MYRTACEÆ.

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(Plate xxvii.)

The plant which forms the subject of this paper was obtained on one of the high spurs radiating from Mount Corricudgy and forming the watershed between the Red Water and an unnamed stream; these waters eventually join and then enter the Widdin Brook which flows north into the Goulburn River—a feeder of the Hunter River.

Mt. Corricudgy is the culminating peak of the main dividing range which forms the watershed between the Hunter and Capertee or Colo Rivers, and reaches a height of over 3,000 feet. The spurs running north towards the Red Water are very rugged and precipitous, and it is only with the very greatest difficulty they can be ascended or descended. It is doubtful if they had ever been visited by white men previous to this trip, which was only possible through the courtesy of Mr. J. Dawson, L.S. for the District, who had been authorised by the Government to “traverse” this hitherto unsurveyed portion of N.S. Wales.

Mr. Dawson admitted it was the roughest piece of field work he had performed during his 24 years’ experience of surveying.

As this district had never before been botanically “worked,” and is almost inaccessible, one naturally expected to find some undescribed plants, and I cannot say I was disappointed. From my collection I now describe what I believe is an unrecorded plant. It was found on the extreme end of a bold headland facing Nulla Mountain, Widdin Brook meandering at the foot of the ranges.

RYLSTONEA, gen.nov.

A delicate, slender, upright plant, rarely with more than one or two stems, under 3 feet high. Leaves small, decussate, terete or laterally compressed. Flowers axillary near the ends of the branches, pedicellate in pairs, borne on a common peduncle. Bracteoles scarious only on the edges, concave, enclosing the bud, not very deciduous, not keeled. Calyx-tube cylindrical, adnate part prominently 5-ribbed; lobes 5, divided into digitate lobes about twice as long as petals. Petals 5, entire, on a constricted base. Stamens 10, alternating with staminodia shortly united at the base in a single ring; anthers globular, opening in two minute pores, connective prominent. Ovary 1-celled, about 8 ovules on a peltate placenta, with two processes at the summit; style exserted, longer and thicker than in the cognate genera, bearded towards the end; stigma terminal, small. Fruits unknown.

Species one.

RYLSTONEA CERNUA, sp.nov.

An erect, glabrous, rather slender shrub, from 1 to 2 feet high. Leaves decussate, crowded, terete or laterally compressed and then channelled above, narrowing below the middle, with a recurved point shortly petiolate, articulate on the decurrent portion on the stem, 4 to 6 lines long, the floral ones almost of equal length.

Flowers cream-coloured with a pinkish base, 4 to 6 lines long, pedunculate near the ends of the branches, peduncles filiform, recurved, 4 to 6 lines long, nodding, on pedicels of 1 to $1\frac{1}{2}$ lines long, *consistently in pairs*. A single bract of about $1\frac{1}{2}$ lines long between the two pedicels.

Bracteoles forming a hood over the corolla and folded over each other on the flower bud, and not falling off till the petals expand, scarious on the edges, *not keeled*, pinkish at the base and toning off to a cream colour at the hood or free end. Calyx-tube cylindrical, 5 to 6 lines long, prominently 5-ribbed (as in *Darwinia*) in the adnate part, lobes simply divided into about

5-10 divisions, except outer lobes which have accessory lobes. Petals entire, imbricate, obtuse, semicircular, contracted at the base. Stamens 10, in a ring at the base of the petals, filaments inclined to vary in length, being alternately long or short. Staminodia alternating with the stamens, ligulate, rather shorter than the stamens. Anthers globular, with two parallel cells opening by minute pores at the summit, or in centre of cells. Connective prominent, forming a central column to which the anthers are adnate for their entire length. Ovary 1-celled. Ovules about 8, attached to a peltate placenta connected with the base of the ovary by a filiform attachment, the top of the placenta bifurcating into two horn-like processes. Style well exerted, twice the length of the calyx-tube, thick at the base and tapering upwards.

Analysis of cognate genera.

Calyx cylindrical, lobes broad, entire or shortly ciliate, flowers in heads. DARWINIA, Rudge.

Calyx cylindrical, lobes 5, subulate, entire, flowers in heads. HOMORANTHUS, A. Cunn.

Calyx cylindrical, lobes 5-10 digitately divided, flowers nodding, not in heads. RYLSTONEA, g.n.

Calyx hemispherical, lobes 5 or 10 deeply divided into subulate plumose or hair-like processes, flowers in corymbose heads. VERTICORDIA, DC.

In Bentham and Hooker's *Genera Plantarum*, Vol. iii., p. 692, the three genera *Darwinia*, *Homoranthus*, and *Verticordia*, of Rudge, Cunningham, and De Candolle respectively, are kept distinct, as in Bentham's *Flora Australiensis*, although Baron von Mueller, in his *Second Census of Australian Plants*, has synonymised *Homoranthus* under *Darwinia*.

Speaking generally, *Darwinia* is distinguished from *Homoranthus* by its broad, entire calyx-lobes, the latter genus having subulate entire lobes. There are of course some minor differences, but the two genera, although closely allied, are distinct, and I

think the systematist is justified in separating them. The gradation of generic characters between the former genus and the latter is much more marked than between the latter and the genus *Verticordia*. One of the characters wanting in this hiatus will be found, I think, in the new genus.

The most constant character of this plant is its nodding, pedunculate cluster of two flowers. A sub-section of *Darwinia* has some of the flowers nodding, but the calyx-lobes and pedicels differ from those of the species now described.

Another character which distinguishes it from the three genera above mentioned is that the flowers are not crowded in heads as in *Darwinia* and *Homoranthus*, nor in corymbs as in *Verticordia*.

It is allied to *Darwinia* and *Homoranthus* by its calyx and anthers, but differs from them in its calyx-lobes as above mentioned, and also by its few pedicellate flowers.

It differs from the two sections of *Verticordia* mentioned by Bentham (B.Fl. Vol. iii.), principally in the shape of its anthers, as well as in other minor points.

The bracteoles are not thick or scarious as in its congeners, nor are they keeled as in *Darwinia*; they are folded well over each other and are rather persistent.

The lobes of the calyx are fewer than generally pertain to *Verticordia*, and thus the gradation from the single lobe of *Homoranthus* to the extreme, subulate, plumose lobes of *Verticordia* is apparently complete.

It is only the calyx-lobes and peltate placenta that connect it with *Verticordia*, and therefore I do not think I am justified in placing it under that genus.

The anthers and staminodia are identical with those of *Darwinia* and *Homoranthus*, but differ in shape from both the porose and the longitudinally opening anthers of *Verticordia*.

The inflorescence of *Verticordia*, which is mostly corymbose, is quite different from that of *Rylestonea*. Through the kindness of Mr. J. G. Luehmann, F.L.S., Curator, National Herbarium of

Melbourne, I have had the opportunity of comparing the latter with a large number of species of the former, and the difference is quite marked.

The pedunculate, pedicellate inflorescence is very characteristic, and the two pedicellate flowers have, I believe, no parallel amongst the species of the cognate genera.

Homoranthus has rarely, if ever, only two flowers, and then these are not pedicellate nor pedunculate.

The distinct exertion of the style is a character which allies it more with *Darwinia* than with the other two genera.

Of all the *Verticordias* it is perhaps more closely related to *V. Wilhelmi*, F.v.M., than any of the others, and this is the first species of that genus, so that *Rylstonea*, having calyx and anthers similar to those of *Darwinia* and *Homoranthus*, and calyx-lobes and placenta of *Verticordia*, I place it in botanical sequence between this latter genus and *Homoranthus*.

EXPLANATION OF PLATE.

Fig. 1.—Twig with inflorescence.

Fig. 2.—Bud.

Fig. 3.—Bud with bracts forced back.

Fig. 4.—Individual flower.

Fig. 5.—Section of flower showing disposition of stamens, staminodia and ovules.

Fig. 6.—Peltate placenta.

Fig. 7.—Stamen with staminodia.

Fig. 8.—Stamen.